

Participatory Restoration: A Tool for Designers to Facilitate Psychosocial Healing

Zoe Swartz

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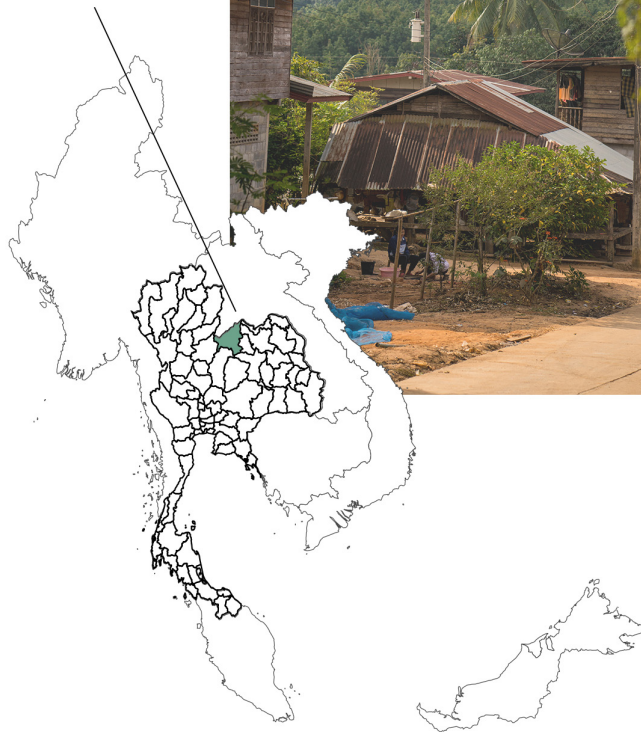
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Figure 1. Photo by The ColorFour, 2017.

NA NONG BONG,
LOEI PROVINCE,
THAILAND



Abstract

As landscape architects and designers, our work often deals with the restoration of disturbed or contaminated sites. However, our scope of work is usually concerned with the ecological dimensions of restoration and does not address the psychosocial trauma that many communities have experienced due to the contamination of their homes. Many restoration projects are tied to a story of environmental injustice and a legacy of harm that may precede the polluting event, so effective restoration should also address these root causes of harm. Here participatory restoration is positioned as a response to instability caused by environmental destruction. Participating in restoration is a therapeutic exercise in both reclaiming agency over a period of instability while also relinquishing control to nature's processes of healing. This paper will present a framework for seeing the multidimensionality of restoration and propose a participatory process that designers can facilitate to aid psychosocial healing alongside ecological restoration.

Introduction: Seeing Communities through the Lens of Kincentric Ecology

As landscape architects and designers, our work often deals with the restoration of disturbed or contaminated sites. However, our scope of work is usually concerned with the ecological dimensions of restoration and does not address the psychosocial trauma that many communities have experienced due to the contamination of their homes. Many restoration projects are tied to a story of environmental injustice and a legacy of harm and instability that may precede the polluting event, so effective restoration should also address these root causes. This paper will present a framework for seeing the multidimensionality of restoration and propose a participatory process that designers can facilitate to aid psychosocial healing alongside ecological restoration.

Three case studies of models for participatory restoration will examine how the dynamics of their models play out between designers/professionals and community members. I will explore how lessons learned from the precedent studies could be applied to Na Nong Bong, a small community in Northeast Thailand that successfully organized for the closure of a destructive gold mine and is now advocating for a participatory restoration plan.

I began working with Na Nong Bong in 2015 before I entered the field of design. The community had been embroiled in a

decade-long fight to close a gold mine that had contaminated their farmland and made villagers sick. I was a program facilitator for a study abroad program and would accompany students to Na Nong Bong to learn about their legacy of organizing and to study the relationship between development and environment justice. I continued working with the community through a collaboration between a group of elder women and my US coworkers to establish a social enterprise that sold their weavings and told their stories to an international audience, with a portion of funds supporting the community's organizing efforts. In Na Nong Bong, weaving holds significance beyond income. Growing cotton for weaving is a way for the community to continue to cultivate a productive landscape despite contamination and build community around a collective act. Weaving is a way for the community to entwine themselves with their local ecosystem, defying the paradigm that their landscape should be sacrificed in the name of extractive industry.

Kincentric ecology is the idea that sustaining life relies on humans seeing themselves as part of a shared ecosystem with nonhuman lifeforms (Salmon, 2000). In Na Nong Bong, the shared lifestyle that formed through the cultivation of cotton and agriculture positioned them as "kin" with their nonhuman counterparts. Understanding kincentric relationships helps us, as designers, see that ecological contamination affects more than soil and water; it also can have traumatizing psychosocial effects on those who are in relationship with the land. For a kincentric community, the violence of extractive industry not only destabilizes the natural ecosystem but also collective and individual identity. As landscape architects, we are adept at considering problems across multiple (human and nonhuman) systems and scales. Seeing communities through the lens of kincentric ecology can help us uncover and bring forth the complexity of restoration and expand our project goals beyond only healing the physical land. This approach opens opportunities for landscape architects to steward the land through addressing legacies and root causes of harm. This requires designers to actively negotiate power and its impact on resource access and justice.

Participatory Restoration as a Tool for Psychosocial Healing

While design alone will not address all dimensions of trauma and violence, I propose participatory restoration as a tool for designers to address both ecological stewardship and psychosocial healing.

Figure 2. Agriculture and weaving foster interpersonal and ecological community.
Photos by Zoe Swartz, 2018



To experience the potentially healing effects of restoration, the participatory process must value multiple types of knowledge, offer the community opportunities to witness nature heal by physically taking part in restoration, and be collaborative with technical experts who can negotiate financial and intellectual resources. Through this approach, knowledge of the land through lived experience would be valued equally with technical knowledge and compensated accordingly. The project team would include members with a variety of backgrounds such as scientists, activists, community leaders, artists, and designers. Instead of simply consulting the community by collecting input at public meetings, communities could be co-creators of the restoration plan and have agency over the decision-making process. Community members could gain new types of knowledge through hands-on citizen science and land management opportunities.

Gretel Van Wieren, a professor of Religious Studies at Michigan State University, theorizes that restoration has the potential to form a public spiritual practice and that the physical act of taking part in restoration can itself be therapeutic. Van Wieren stipulates that the restoration process cannot be a top down purely technically driven approach and must include public volunteer participation. Van Wieren claims that ecological restoration creates natural value and is, therefore, an “ethical act.” Participatory restoration brings people together around this ethical act which builds an action-oriented community around a shared value that she calls a “shared community of practice.” This in turn, creates spiritual or moral value (Van Wieren, 2008). These shared communities of practice foster “ecological citizenship” through a “democratic culture of nature,” being, “a stronger human community that not only takes into account, but is actively

Figure 3: In Na Nong Bong, engagement in long-term protest can lead to emotional trauma. However, skills formed from community organizing can translate to organizing participatory restoration. Photo by Rotjana Kongsean, 2022



inclusive of, concerns over the health, maintenance, and sustainability of larger natural systems (Light, 2006).

In Na Nong Bong, the “slow violence” (Nixon, 2011) of pollution paired with the stress of being engaged in a decade-long protest created a deep feeling of instability, which permeated through many aspects of daily life, making it difficult to image in collective future. The community recognized that these fractures in community cohesiveness, were impeding their ability to agree on a way forward after the closure of the mine. Ecological citizenship, which Na Nong Bong certainly practices, often includes land-based rituals. In Na Nong Bong, land-based celebrations and religious rituals have played an important role in uniting a re-grounding the village during unstable times. This sense of coming together and unity is one way that participatory restoration can aid in social healing and lead to benefits beyond the ecological.

Van Wieren describes potential positive effects on mental health that come from observing nature heal. Participating in restoration both reclaims agency and forces humans to relinquish control to natural processes. Especially in cases where an environmental injustice has occurred, participatory restoration ultimately gives the citizens the power over the plan implementation while also surrendering control to “the slow beauty of the self-healing nature of living places,” (Mills, 1995). Watching the powerful process of nature’s recovery, while participating in restoration, is a therapeutic exercise in claiming power over what is possible to control and relinquishing control over what is out of human hands. By witnessing nature heal, humans may better be able to imagine how they themselves might also have the potential to heal. The following two case studies will examine the aspects of a participatory restoration process that allow for the therapeutic qualities of restoration to take hold.

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Sanriku Fukko National Park and More wa Umi no Koibito (The Forest is Longing for the Sea)

Tokoku is a small coastal city in Japan, known for its fishing and oyster industry. The 2011 earthquake and tsunami destroyed a third of the city and the whole fishing industry. In addition to the immense rebuilding and ecological remediation needed after the disaster, there was also a traumatized population, including aging fisherpeople who had already been struggling economically. The region’s recovery plan included the reconstruction of the Sanriku Fukko National Park, which aimed to restore the linkages between the forest and the sea, by reviving key ecosystem services that

supported the economy and culture of the area. A local NGO called More wa Umi no Koibito (translated as The Forest is Longing for the Sea) spearheaded the initiative and created a grassroots, participatory, and intergenerational restoration process.

Restoration centered around twin concepts of satoyama and satoumi, which highlighted the interdependent relationship between humans and the environment they inhabit. Satoyama refers to such relationships in the context of agricultural landscapes; satoumi refers to similar relationships between the sea and those who live near it and are supported by its biodiversity (Duraiappah et al., 2012). Historically, the forest would help filter water as it ran to the sea, making for healthy oyster populations. In recent years, this symbiotic relationship was lost due to unsustainable forestry practices, so the quality of oysters and the economy suffered (Takeuchi, 2011).

This project's process for participation brought elder fisherpeople and young school children together to physically restore the satoyama and satoumi balances by planting trees to revive upland forest health. Kazuhiko Takeuchi, a sustainability scientist who has studied this project extensively, also posits that providing opportunities to physically participate in restoration and connect with the local environment can have healing effects on the impacts of trauma. This model of direct, physical participation resulted in non-ecological psychosocial benefits in several ways. Firstly, this process made visible the linkages between terrestrial and aquatic productive landscapes. Fisherpeople came to the forest to participate in restoration but were able to see the results manifest in the improved health of their oyster farms. This helped to restore their faith in the power of nature to heal and provided hope that their landscapes could once again support them economically. Secondly, bringing together an intergenerational group of people to perform restoration resulted in the formation of Van Wieren's "shared communities of practice." This likely contributed to the community's ability to meaningfully participate in the disaster recovery and national park planning process, facilitated by More wa Umi no Koibito.

In this case, More wa Umi no Koibito took on the role of connecting resources across disciplines and negotiating power and justice for the community. The organization mediated between the community, scientists, planners, and the local government to create a restoration plan that included knowledge from each stakeholder group and appealed to a cultural concept in which all parties could relate. They used their connections to bring resources to the community so that the restoration process could

happen in a timely manner and the community could begin participating from the project onset. Additionally, More wa Umi no Koibito served as a mediator of justice because the aim of the project addressed economic hardship and loss of cultural connection to the land that was present before the disaster.

AMD & ART Park

The Acid Mine Drainage and Art Park (AMD&ART), in Vintondale, PA, took an interdisciplinary expert-driven approach to restoration. Vintondale is a former mining town that suffered from water contamination from acid mine drainage, a sludgy toxic byproduct of mining, that turned the Blacklick Creek, which runs through the community bright orange. The absence of the mining industry left very little economic opportunity in Vintondale which generated a cycle of systemic poverty. During the mine's operation, the company intentionally pitted the numerous ethnic groups of workers against each other, resulting in an enduring legacy of distrust and pessimism.

AMD&ART Park was a 1994 project that sought to create a public space that shared the town's history alongside remediation

Figure 4. Women who are involved with the community's weaving group also participated in Na Nong Bong's first grassroots restoration event. Photo by Rotjana Kongsean, 2022

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of AMD by bridging the arts, sciences, and humanities. AMD & ART's theory of restoration relied on interdisciplinary professional expertise, authentic storytelling of the industrial past, and incorporating community input. Towards these goals, the project was successful. The design process entailed the collection of stories and photos from the community by historian T. Allen Comp. Land artist Stacey Levy used these images and stories to create public sculptures that reflected the community's history and industrial identity. Scientist, Bob Deason, and landscape architect, Julie Bargmann worked together to design a remediation system that would render the orange sludge of AMD clear, and a public space with tree plantings that used foliage colors to highlight the remediation process.

The project had strong potential to facilitate psychosocial healing because it both provided opportunities to watch nature heal and used public art and storytelling to illuminate the town's industrial heritage and the inherent legacy of harm that came with it. According to Van Wieren, to participate in restoration is to lay "public witness to the collective moral failures of industrial society to live more respectfully and harmoniously with the land." This process of calling out injustice is one manifestation of the emotional healing that can arise from participatory restoration. Additionally, their extensive community engagement meetings and the final design included community input and desires. However, the design and implementation process were still expert led, and did not shift the balance of power towards the community.

When asked what he would have done differently, project founder, T. Allen Comp said that he would have sited the project in a community with more organizational capacity and a desire for a remediation project. In 2005, the project team attempted to hand off the running and maintenance of the park to the community but, unfortunately, the transfer of project ownership was unsuccessful and today the park is essentially an abandoned site. The project team did an exemplary job of negotiating financial resources for the project by raising \$800,000 over eleven years. However, there was a gap in negotiations of power and justice for the community.

The legacy of the factory sowing distrust across different community groups over the years, alongside economic precarity, meant that town members were not well positioned to take on their own organizing and participation in the project. For the project to be sustained long term, more investment in the community's capacity and stability was needed. This could have been

accomplished through restoration-oriented job training and employment or other activities explicitly geared towards economic development. AMD&ART highlights the importance of highly diverse interdisciplinary teams- even with team members spanning four disciplines, collaboration from additional fields, such as economic development, would have greatly benefited the project's longevity.

Participatory Restoration in Na Nong Bong: A Worthy Campaign

Both case studies demonstrate that participatory restoration has the potential to help communities heal from ecological disasters if the participatory process values multiple types of knowledge, allows the community to watch nature heal through direct physical participation, and bridges disciplines to facilitate a coalition for fundraising and resource sharing. Both examples underscore the importance of designers (or another organization like More wa Umi no Koibito) to identify and bring together unlikely connections as allies and leverage their positionality to garner resources. Landscape architects could be well poised to serve as facilitators across disciplines seeing as our training teaches us to see problems and solutions across multiple systems and scales.

Perhaps Na Nong Bong can become an example of this approach. The government has promised to restore the land, but the timeline is slow and ambiguous, and only three villagers are allowed to provide input. Additionally, there is only provision for ecological restoration and no attempt to alleviate the other dimensions of trauma caused by the mine. Even from an ecological standpoint, there is not an emphasis on the restoration of productive landscapes so it is unclear what benefits the villagers will experience. This framework for restoration does not meet the above criteria for participatory restoration and therefore the community, which has suffered numerous collective traumas, injustices, and violence at the hands of the mining company (Fortify Rights, 2018), would not be well positioned for recovery.

The community has two primary goals for restoration: to remove toxins from the soil so they are no longer harmful to people and agriculture, and to reclaim agency, showing the government

that they will not stop fighting until justice is served. Unwilling to wait or settle for the government's simplistic plan, the community has partnered with a Thai activist organization called Campaign for Public Policy on Mineral Resources (PPM) and EARTH Thailand, a nonprofit environmental science organization, among numerous other collaborators through the years, to start making their own plan for participatory restoration. Already, they have identified three test plots where the community can take part in citizen science to experiment with plantings that remediate the soil. The community will plant crops on these plots and monitor them to see if crabs and fish will return to the surrounding waterways. EARTH and PPM are assisting with the technical aspects, such as testing soil.

PPM acknowledges that this phase of participatory restoration is more about the process than the product. After over a decade of protest, there are cracks in the community's social fabric and disagreement over how to approach restoration. However, according to PPM, everyone agrees that they want to live in a safe community where their health is not harmed by contamination. PPM's aim is to bring people together around this shared goal and in turn to involve everyone in the planning and design process so that they can feel shared ownership of the project, collaborate, and regain trust. They have also been bringing the community together around land-based traditions such as *seup chata*, an annual ritual where villagers visit a local mountain that has not yet been mined and call upon the spirit of the mountain to continue protecting it. PPM also acknowledges that psychosocial healing is a murky topic and they do not have clear steps to overcome all dimensions of trauma. However, as demonstrated by the above case studies, their insistence on a participatory restoration process has the potential to yield psychosocial benefits for the community and is vital for regaining agency, repairing relationships, and restoring health and livelihoods.

Unlikely Accomplices: Next Steps for the Role of the Designer

Na Nong Bong and PPM are crafting a visionary plan and helping expand the paradigm of traditional restoration by prioritizing participatory restoration above technical restoration, and thereby its therapeutic potentials. Na Nong Bong's current barriers to success are a lack of connection to technical knowledge and financial resources. For the last decade, Na Nong Bong has strategically cultivated a global network by hosting study abroad students and

researchers and selling their weaving internationally. Now is the time for the international friends of the community, myself included, to leverage our skills and access to knowledge and power to support a just restoration for Na Nong Bong.

AMD&ART was successful in bridging disciplines to address an issue of deep complexity and raising the funds to do so. Although suffering from collective trauma, Na Nong's deep history of organizing and their relationship with PPM, a mediating organization, would position them to be excellent partners for an interdisciplinary team of technical experts. However, for this model to be successful, community leaders would need to be treated as experts and have the final say in their plan for restoration. All members of the community would need to be given the opportunity to participate in the physical acts of restoration to feel the positive mental health benefits of watching nature heal and the increased unity of coming together by working towards a shared goal.

Conclusion: Healing on Unstable Ground

Restoration is a response to the instability of disturbance and yet, without a shift in balances of power, it will occur on unstable ground. The Society for Ecological Restoration states that the goal of ecological restoration is to return a degraded ecosystem to its historic trajectory, not its historic condition. This approach acknowledges that current conditions, including climate change, may prevent recovery to its former state. When considering the historic trajectory of an ecosystem, it is important to also consider the social conditions that had historically provided for a relationship of stewardship between people and their ecosystem as well as the systems of power that enabled some to exploit the land. Additionally, it is imperative that a successful restoration process not be used as a justification for continued extraction someplace else. Participatory restoration is one way of shifting conditions back to a historic trajectory of stewardship and facilitating a power dynamic that may allow for the effects of restoration to endure. Likewise, the prioritization of psychosocial healing alongside ecological restoration supports ecosystem stability by bolstering the well-being and capacity of its kincentric stewards.

Comp, Allan T. "Science, art, and environmental reclamation: three projects and a few thoughts." In Berger. (2008). *Designing the reclaimed landscape* edited by Alan Berger. Taylor & Francis.

Duraiappah, Nakamura, K., Takeuchi, K., Watanabe, M., Nishi, M., & United Nations University Press. (2012). *Satoyama-Satoumi Ecosystems And Human Well-Being: Socio-Ecological Production Landscapes Of Japan*. UNUP.

Figley. Charles R. and Saul, Jack. "Introduction: Collective Trauma, Resilience, and Recovery." In Saul. (2014). *Collective trauma, collective healing: promoting community resilience in the aftermath of disaster* / Jack Saul. (First edition.). Routledge. <https://doi.org/10.4324/9780203842188>

Fortify Rights (2018). "We Fight to Protect Our Home": Reprisals Against Environmental Defenders in Loei, Province, Thailand.

Light, Andrew. "Ecological Citizenship: The Democratic Promise of Restoration." In Platt. (2006). *The humane metropolis: people and nature in the 21st-century*.

Mills. (1995). *In service of the wild: restoring and reinhabiting damaged land* / Stephanie Mills. Beacon Press

Nixon. (2011). *Slow Violence and the Environmentalism of the Poor*. (1st ed.). Harvard University Press., 2.

Salmon. (2000). Kincentric Ecology: Indigenous Perceptions of the Human-Nature Relationship. *Ecological Applications*, 10(5), 1327. [https://doi.org/10.1890/1051-0761\(2000\)010\[1327:KEIPOT\]2.0.CO;2](https://doi.org/10.1890/1051-0761(2000)010[1327:KEIPOT]2.0.CO;2)

Society for Ecological Restoration. *What is Ecological Restoration?* <https://www.ser-rrc.org/what-is-ecological-restoration/>

Takeuchi, Elmqvist, T., Hatakeyama, M., Kauffman, J., Turner, N., & Zhou, D. (2014). Using sustainability science to analyse social-ecological restoration in NE Japan

after the great earthquake and tsunami of 2011. *Sustainability Science*, 9(4), 513–526. <https://doi.org/10.1007/s11625-014-0257-5>

Tang, Alisa. (2014). "Armed men attack Thai villagers to get to controversial goldmine," *Reuters*, May 16, 2014.

Van Wieren. (2008). Ecological Restoration as Public Spiritual Practice. *Worldviews: Global Religions, Culture, and Ecology*, 12(2-3), 237–254. <https://doi.org/10.1163/156853508X360000>

Weinstein, Emily, Jessica Wolin, and Sharon Rose (2014). *Trauma Informed Community Building: A Model for Strengthening Community in Trauma Affected Neighborhoods*. San Francisco: BRIDGE Housing Corporation (BRIDGE), Health Equity Institute.